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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,329	12/31/2003	Linda S. Powers	13368.0002 (Div. I)	8210

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EXAMINER	
BEISNER, WILLIAM H	

ART UNIT	PAPER NUMBER
1797	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/749,329	POWERS ET AL.	
	Examiner	Art Unit	
	William H. Beisner	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 October 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3* is/are pending in the application.

4a) Of the above claim(s) *2 and 3* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 2 and 3 are objected to because of the following informalities: With respect to both claims 2 and 3, Applicants currently state on the record that these claims are withdrawn, however, a requirement for restriction has not been made. It is not clear if Applicants intended to cancel these claims instead. Clarification and/or correction is requested. Also, the previous version of claim 2 included the language "apparatus" rather than "method". Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 appears to invoke 35 USC 112, sixth paragraph, with respect to elements (a) and (c) of the claimed apparatus. 35 USC 112, sixth paragraph, requires that the specification clearly set forth the structures that are associated and/or correspond with the claimed means. The instant specification fails to clearly set forth which structures, if any, correspond to the means recited in claim 1. As a result, the claim fails to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants' response filed 10/31/2007 fails to address this rejection. As a result, the rejection has been maintained.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Powers (US 5,760,406) in view of Ho (US 5,701,012) and either Cheng (Aerosol Science and Tech.) or Pan et al.(Optics Letters).

The reference of Powers discloses a device (10,12,14,16) for directing electromagnetic radiation towards a sample (18) wherein the energies emitted excite at least one intrinsic microbial fluorophore (See column 3, lines 27-34). The apparatus includes multiple detectors (26, 30) capable of converting the emitted or reflected and scattered radiation into electrical signals wherein the detector is capable of detecting wavelengths above 320 nm (See filters 24 and 26). Finally the apparatus includes a device for analyzing the electrical signals to determine the presence of microbes (See column 4, line 66, to column 5, line 20).

While the reference of Powers discloses the detection of reflected light, Claim 1 first differs by reciting that the detection and analysis system additional detects scattered light and background energy.

The reference of Ho discloses that it is conventional in the art of fluorescence analysis of biological materials to detect and compensate for both background light and scattered light by subtracting these detected signals from the detected fluoresce emission of the microbial fluorophores (See column 9, lines 20-36).

In view of this teaching, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of the primary reference to compensate for scattered light and background light for the known and predicable result of improving detection efficiency by removing all possible energies not directed related to the emissions of the microbial fluorophores.

Claim 1 further differs by reciting that the device is constructed so as to direct discrete regions of electromagnetic radiation towards the sample so as to excite more than one intrinsic microbial fluorophore.

Both of the references of Cheng and Pan et al. disclose that it is conventional in the art of fluorescence analysis of biological materials to excite the biological sample using discrete regions of electromagnetic radiation so as to excite more than one intrinsic microbial fluorophore (See the "Introduction" section, pages 186-187, of Cheng and Figure 1 of Pan et al.).

In view of either of these teachings, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of the primary reference to excite the biological sample at multiple wavelengths of light for the known and predicable result of allowing the discrimination of the differences in fluorescence spectra from various types of biological samples.

Response to Arguments

8. Applicant's amendments and related arguments, see pages 3-4 of the response filed 10/31/2007, with respect to the rejection(s) of claim(s) 1-3 under 35 USC 102 over Powers have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Powers (US 5,760,406) in view of Ho (US 5,701,012) and either Cheng (Aerosol Science and Tech.) or Pan et al.(Optics Letters).

With respect to Applicants' comments concerning the references of Powers, the Examiner would like to point out that the reference of Powers is not limited to "a ratio". The reference also

discloses subtraction of the reflected signal from the detected fluorescence (See Figure 1 and column 4, lines 23-46). Additionally, it is noted that the features upon which applicant relies (i.e., removal of the background, reflected and scattered light) are not clearly recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Beisner whose telephone number is 571-272-1269. The examiner can normally be reached on Tues. to Fri. and alt. Mon. from 6:15am to 3:45pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys J. Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William H. Beisner/
Primary Examiner
Art Unit 1797

WHB